

VIAGGIO DI LEONARDO FEA
IN BIRMANIA E REGIONI VICINE

XXXI.

ON THE MYRIOPODA OF BURMA.

Pt. 2. Report upon the *Chilopoda* collected by Sig. L. FEA and Mr. E. W. OATES
by R. I. POCKOCK of the British Museum (Nat. Hist.).

Until the present time very few species of Centipedes have been recorded from Burma, and, except from analogy, practically nothing was known of the Burmese *Chilopod* fauna. But thanks to the energy with which Sig. L. FEA and Mr. E. W. Oates have amassed material of this group, it may now with confidence be asserted that we are far better acquainted with the *Chilopoda* of this country than with those of any other district in the Oriental Region. But although much has been done, there is no doubt that much remains to be discovered. And undoubtedly the best results in the future will be obtained by paying special attention to the collecting of the smaller kinds of Centipedes, such as the *Lithobiidae*, the species of *Cryptops* and above all the *Geophilidae*.

The specimens forming the subject-matter of the present paper are referable in all to 32 species, of which nearly half — namely 14 — prove to be new. There are 3 new species of *Scutigera*, 2 of *Lithobius*, 2 of *Scolopendra*, 1 of *Otostigma*, 1 of *Heterostoma*, 2 of *Cryptops*, 1 of *Himantarium* and 2 belonging to a new genus which I propose to call *Himantosoma*.

Concerning these the only ones about which I feel any doubts are the species of *Scutigera*. But the species of this genus are so exceedingly hard to determine that I think few experienced in the matter will blame me if I have described as new any form that has been previously made known. Three species only of *Lithobius* have been hitherto recorded from the Oriental Region, so it is not surprising that both the species obtained in Burma have certainly not been described before this. The two new species of *Scolopendra* are well marked. The two species of *Otostigma* and *Heterostoma* are also undoubtedly new; the same may be said of the *Cryptops* and of the three species of *Geophilidae*. Of the forms that are not new perhaps the most interesting is *Ot. rugulosum*. It is remarkable that this species should be so exceedingly common in Burma and yet should ere this have never been met with in any part of the Oriental Region.

ANAMORPHA.

SCUTIGERIDAE.

1. *Scutigera longicornis* (FABR.), HAASE.

Die Indisch-Australischen Chilopoden p. 17, pl. I, fig. 27; pl. II, fig. 33, 1887.

Only two specimens, which I refer to this species, were obtained by Sig. L. Fea. One from Meetan (N. Tenasserim, on the Hougdarau River) measuring 36 mm. is of an obscure olivaceo-ochraceo-ferrugineous ground colour with faint indications of a paler median band; the stoma-saddles wholly pale coloured and more ferrugineous than the rest of the tergites; the legs with wholly ochraceous tibia and tarso-metatarsus, the patella marked with two bands of dark-green and the femora at the posterior end of the body with a single patch of green beneath. The stoma-saddles are long and high and the stomatal area narrow, elongate and not dilated behind.

The second specimen from the Farm Caves (Moulmein) agrees

with the preceding in the pattern of its colouring, but is very much paler; the median band is more visibly defined, and the legs are less distinctly annulated, there being only a single green band at the distal end of the patella. This specimen measures about 35 mm. in total length.

2. *Scutigera birmanica*, sp. n.

Colour; the ground tint varying from olivaceous to ferruginous; tergites marked with a more or less clearly defined paler median longitudinal band which may or may not be continued to the posterior margin of the plate over the stomatal area; the right and left half of each stoma-saddle always dark-coloured — deep olivaceous when the tergites are olivaceous and piceous when the tergites are ferruginous — but always *darker* in tint than the rest of the tergites; legs of a uniform ochraceous or ferruginous tint, with at most a very faint indication of greenish patch at the distal extremity of the patella; antennae and under surface of the same tint as the legs.

Head with strongly raised smooth or almost wholly smooth margin; the occipital region sparsely spicular, with a shallower transverse anterior depression and a deeper, posteriorly widening, posterior depression, the central sulcus running from the anterior depression to the inter-antennal area of the frontal region, the lateral sulci run from the inner angle of the eye almost as far as the termination of the median sulcus, then abruptly curve backwards and inwards; labral region hairy.

Basal plate visible, with spicular margin.

Tergites sub-serially spicular, marginally and superficially; more coarsely so at the posterior than at the anterior end of the body; each marked laterally with two depressions, a third fainter depression defining the stoma-saddles. *Stoma-saddles* high; longer than wide, strongly, plentifully and subserially spicular; the stomatal area elongate, narrowed anteriorly and posteriorly, *not* widened behind; last tergite pyriform, much narrowed behind with lightly emarginate posterior border.

Sternites flatter, with a median anterior sulcus.

Legs stout; femur weakly spinous and weakly carinate, with only one strong keel beneath; patella and tibia strongly carinate and serrate, tarso-metatarsus thickly pubescent.

Length up to 40 mm.

An immense number of specimens ranging in length from 15 to 40 mm. were taken by Mr. Oates at Pegu, one adult from Rangoon, and one adult from S. Tenasserim. Sig. L. Fea obtained three adult specimens at Palon (Pegu) and two adults and one young at Bhamò (Upper Burma).

In the series from Pegu, from which the description has been mainly drawn up, it is noticeable that the smaller specimens are much greener than the larger ones which are more ferruginous.

This species is closely allied to *Sc. longicornis* (Fabr.) and to *Sc. chunifera* of Wood, and may ultimately prove to be a variety of either one or the other. It resembles both in its elongate and narrow stomata and in its long, high stoma-saddles, but it appears to differ from both in colour. Thus it may be recognised from *Sc. longicornis* by the absence of annuli on the legs, and from both by the dark colour of its stoma-saddles.

3. *Scutigera feæ*, sp. n.

Body robust, attenuated anteriorly.

Colour (in alcohol) variable; upper surface mostly of an obscure ochraceo-olivaceous tint, with a median, darker, longitudinal band and lateral, irregular patches of darker colour; the stoma-saddles clearly or obscurely ochraceous or ferruginous but always brighter in colour than the rest of the tergites; antennae and tarsal segments of legs ochraceous, proximal segments of legs mostly very pale olivaceous, the patella with two obscure rings of darker tint; lower surface pale ochraceous or olivaceous.

Head sparsely spicular posteriorly, sparsely hirsute in front; a conspicuous median sulcus running from the interocular to

the inter-antennal area; two curved sulci running forwards and internally from the inner angle of the eye; posterior region of the head marked with an anterior transverse depression, wider mesially, from the middle of which there runs backwards a wider and deeper depression, which widens posteriorly.

Antennae about half as long again as the body.

Basal plate visible. *Tergites* with serrate margins, each furnished with an anterior and a posterior lateral, low, rounded prominence, closely punctured and sparsely spicular, the spicules stronger and more numerous in the posterior region of the body; the stoma-saddles much wider than long, each half low, rounded and furnished with two or three irregularly defined series of spicules, the stomata slit-like, elongate, the area in which each is placed, triangular, widened posteriorly; the last tergite medianly depressed, narrowed posteriorly, with rounded or lightly emarginate hinder border.

Legs with femora weakly and subserially spicular, patellae and tibiae strongly carinate and serrate; tarsi annulate, distinctly pubescent; anal leg less than three times as long as the body.

Sternites with a strong median sulcus.

Length up to 31 mm.

A number of specimens were collected by Sig. L. Fea at Palon and two young examples at Bhamò.

In size this species approaches the preceding two, but it may be at once separated from them by its wide stoma-saddles with a posteriorly dilated stomatal area.

4. *Scutigera marmorea*, sp. n.

Of small size, moderately robust.

Colour; ground tint of tergites very pale ochraceo-olivaceous; lateral portions of the tergites marbled with dark green, with a conspicuous dark green patch on each side at the posterior end; a conspicuous median dark green band, which is itself divided longitudinally and mesially by a fine, narrow, testaceous

band; stoma-saddles testaceous, stomatal area dark-coloured; legs of a very pale olivaceous tint, femora furnished beneath with two dark patches, patella marked with three dark green annuli, tibia with two dark green annuli, tarso-metatarsus with one proximal band of this same colour; head marbled with dark green, antennae ochraceous, the femur of the maxillipede with one external patch of dark green.

Head; region of labrum hairy, frontal region spicular and marked with the three normal sulci, the oblique curved ones which run inwards and forwards from the inner angle of the eye and the median one which extends backwards to the occipital region; the inter-ocular area flat, defined behind by a crescentic depression which, concave forwards, runs from eye to eye; the posterior occipital region marked by a median nearly circular depression, which is scarcely noticeably continuous with the transverse depression; this region of the head sparsely spicular.

Tergites marginally serrate, irregularly but conspicuously spicular, those in the anterior half of the body marked with shallow depressions defining two rounded elevations. Stoma-saddles much wider than long, each half rounded and but little elevated; stomatal area triangular, widely open behind; stomata small, elongate and slit-like, not projecting so far posteriorly as the margins of the saddles; posterior tergite very wide behind, quadrate, with lightly convex hinder border.

Sternites hairy, medianly sulcate.

Legs hairy; femora sub-serially spinous, patella and tibia carinate and serrate.

Length 19 mm.

A single specimen from Palon, collected by Sig. L. Fea.

In colour this species appears somewhat to resemble *Sc. maculata* of Newport from Australia; it differs from it, however, in its wide posterior tergite. By this character, as well as by being more strongly coloured and having the occipital region of the head differently depressed, it may be separated from

Sc. feae, which it resembles in its wide stoma-saddles and posteriorly dilated stomatal areas.

Two more specimens of *Scutigera* were obtained by Sig. L. Fea, but the condition of these is so imperfect that I have not attempted to identify them. One of them was from Thagatà on Mt. Mooleyit, in Tenasserim, and the other was from the same mountain, at an altitude of 1800-1900 m.

LITHOBIIDAE

5. *Lithobius* (*Archilithobius*) **birmanicus**, sp. n.

Small and slender. *Colour* ochraceo-olivaceous, sternites, legs and posterior borders of tergites paler; anterior half of head and distal segments of antennae fuscous; posterior half of head testaceous.

Antennae long, hirsute; composed of twenty segments; last segment longer than the penultimate.

Ocelli about six on each side, arranged in two rows.

Tergites more or less rugulose. Seventh, ninth and eleventh with rounded angles.

Coxae of maxillary feet armed on each side with five or six more or less conspicuous teeth.

Coxal pores rounded; arranged in single rows composed of three or four.

Anal legs long, armed beneath with spines as follows 1.1.1.0; claw with basal spur. Female generative forceps with trilobate claw and two spurs on each side.

Length about 10 mm.

Locality: Tharrawaddy (E. W. Oates), Palon (L. Fea).

The sole Oriental species of this sub-genus is *L. grossidens*, Meinert, from the Nicobar Islands. But *grossidens* has longer antennae, many more eyes and a single claw on the anal legs.

6. *Lithobius* (*s. str.*) **feae**, sp. n.

Robust, shining; of the size and appearance of *L. forficatus*; ochraceo-castaneous above; paler beneath.

Antennae composed of from twenty to twenty three segments; hirsute.

Eyes composed of six ocelli arranged in two rows.

Tergites slightly wrinkled laterally, finely punctured and furnished with scattered hairs proceeding from larger pores.

Coxae of maxillary feet bearing in front on each side seven teeth.

Coxae of the posterior four legs furnished with a single series composed of from 5-7 slightly elongate pores.

Coxae of the anal legs furnished with a lateral spine.

Genital appendages of the female bearing on each side three long spurs and a simple undivided claw.

Length 20 mm.

One specimen from Mount Mooleyit, at an altitude of 1800-1900 m. Collected by Sig. L. Fea.

Unfortunately the only example of this species that was obtained is imperfect owing to the loss of the anal legs. So few representatives, however, of this genus have been recorded from the Oriental Region that there can be no question of the distinctness of *L. feae*. In size and colour it very much resembles the well known *L. forficatus*, but it may be at once recognised by its shorter antennae and smaller number of ocelli. Moreover, the form of the female genital appendages is different in the two species.

Of Oriental forms it comes nearest to *L. semperi*, Haase, from the Philippines; but this last has fewer maxillary coxal teeth and a differently formed genital appendage. From *L. hardwickei*, Newport, it may be recognised by its shorter antennae and fewer ocelli.

EPIMORPHA.

SCOLOPENDRIDAE.

7. *Scolopendra subspinipes*, LEACH.var. *de haanii*, Brandt.

This well-known form, considered by some to rank as a true species, is noticeable as being the largest Oriental *Centipede*. It is very common in Burma. Specimens were obtained by Signor L. Fea at the following localities: Upper Irrawaddy: Male, Bhamò, Mandalay; — Pegu: Palon; — Tenasserim: Thagatà on the Mooleyit, Kaukareet, Malewoon; — Carin mountains: Cheba district (900-1200 m. alt.); by Sig. Comotto at Minhla and by Mr. E. W. Oates at Thayetmyo, Toundwingyi, Taikkyi, Tharrawaddy, Pegu Hills, Rangoon, Mandalay, Moulmein, Reef Island (Tavoy) and Pyminana (Upper Burma).

8. *Scolopendra morsitans* (Linn.), KOHL.

This species has an exceedingly wide range and is perhaps the commonest of all in collections. It is much smaller than the preceding and may be at once recognised from it by its shorter and thicker anal legs and by having the femur of these appendages furnished beneath with from 8 to 10 (usually 9) spines arranged in three longitudinal series.

In Burma it appears to be as common as *Sc. de haanii*. Specimens were obtained by Sig. Fea at Upper Burma: Teinzò, Bhamò; — Pegu: Taikkyi, Palon, Rangoon; — Tenasserim: Kaukareet, Malewoon; — Carin mountains: Cheba district (900-1200 m. alt.), by Comotto at Minhla and by Mr. Oates at Akyab, Taikkyi, Tharrawaddy, Moulmein, Toundwingyi, Rangoon, Thayetmyo, Mandalay and on Table Island (Andamans).

9. *Scolopendra feae*, sp. n.

Colour. Head plate and anterior half of 1st tergite reddish brown; tergites pale olivaceous or ochraceous with dark olivaceous posterior borders; antennae green, paler at the base; legs pale green or pale ochraceous.

Head shining, very feebly punctured, with a median almost obsolete fine sulcus in its hinder half, lightly impressed mesially on each side of the sulcus.

Antennae short, composed of 17 segments, whereof the basal five are nearly naked and the rest pubescent.

Maxillary sternite and feet very feebly punctured; prosternal plates small, separated, each furnished with five, small, rounded denticles; basal tooth very small and simple.

Tergites smooth, shining, not punctured; from the second bisulcate, from the ninth or tenth with raised lateral margins.

Sternites smooth, shining, not punctured, bisulcate.

Anal segment; tergite without median sulcus, posteriorly impressed; *sternite* narrow, with converging lateral margins, rounded posterior angles, straight posterior margin; *pleurae* normally punctured, with a short, simple process and no lateral spine; *anal legs* of moderate length, somewhat slender, armed above on the inner side with one small spine or two large stout spines (not including the posterior angular spine, which is strong and simple), on the under surface there are five or six strong stout spines arranged in pairs in three sub-parallel series; tarsal segments without spurs; claws without basal spurs.

Legs; tarsi of all the legs without spurs; claws with two basal spurs.

Length about 53 mm.

Habitat. Carin mounts, Chebà district, village of Meteleo, 900-1200 m. One specimen collected by Sig. L. Fea.

This species is very distinct. In its banded colouring it very much resembles some specimens of *Sc. mutilans* or *Sc. morsitans* or *Sc. subspinipes*. From the first and last of these it may be

recognised by the greater number and greater strength of the spines on the anal femora and from *Sc. morsitans* by the smaller number and still greater strength of these same spines. But its most distinctive character is without doubt the entire absence of tarsal spurs.

10. ***Scolopendra pinguis***, sp. n.

Colour upper surface of a deep uniform olivaceous tint; under surface paler; legs ochraceous.

Head plate nearly circular in shape, feebly punctured, without sulci.

Antennae short, tapering, composed of 17 segments, whereof the basal three are naked and the rest pubescent.

Maxillary sternite with wide, short, contiguous but obsoletely denticulated prosternal plates; the basal tooth small and simple.

Tergites smooth, very feebly punctured; from the third bisulcate, but only the last two with raised margins.

Sternites smooth; those in the anterior third of the body completely or nearly completely bisulcate, those in the posterior two thirds obsoletely bisulcate only in front.

Anal somite; tergite with straight, parallel, raised margins, not sulcate and not impressed; *sternite* somewhat wide, with converging sides, rounded angles and straight posterior border; *pleurae* thickly and normally punctured, a single lateral spine, process very short, blunt and tipped with five small spines; *legs* absent.

Legs with first tarsal segment armed with a single spur and the claws with two basal spurs.

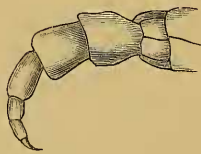
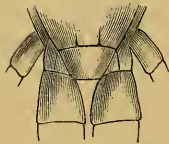
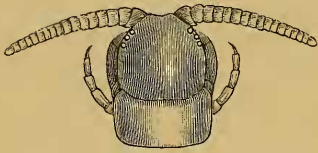
Length 64 mm.

Habitat. Carin mounts, Cheba district, 1000-1200 m. One specimen obtained by Sig. L. Fea.

In spite of the absence of the anal legs I have no hesitation in describing this specimen as the type of a new species. Its uniform green colouring is very peculiar. In this respect it approaches *Sc. japonica* of L. Koch more nearly than it does

any other Eastern form; but from this species it may be recognised by the absence of conspicuous teeth on the prosternal plates, by the unraised margins of all but the two or three last tergites, by the shortness of the posterior sternal sulci etc. It is moreover a broad, stout parallel-sided form, whereas *Sc. japonica* is of relatively slender build.

11. *Asanada brevicornis*, MEINERT.



Asanada brevicornis.

Trans. Am. Phil. Soc. XXIII, p. 189 (1886).

Yenangyoung (Upper Burma) (Fea), Minhla (Comotto), Reef Island (Tavoy), Table Island and Great Cocos Island (Andamans) (Oates).

The type of this species was taken at Kulu (in the Himalayas?).

The genus *Asanada* closely resembles *Cupipes*, but may be separated from it by having smooth and not punctured anal pleurae.

I have taken this opportunity of figuring this remarkable and little-known species.

12. *Otostigma carinatum*, PORATH.

Bih. Sv. Sv. Vet.-Ak., Handl. IV, no. 7, p. 20; and all authors.

Specimens were obtained by Sig. L. Fea at Teinzò, Palon, Malewoon and Thagatà on Mt. Mooleyit, and by Mr. Oates at Akyab, Reef Island (Tavoy) and on great Cocos Island (Andamans).

The colour of the Burmese specimens of this species is almost always ferruginous or ochraceous, with castaneous head plate and first tergite, the anal legs are either green or reddish. The

tergites are either slightly wrinkled and weakly and sparsely spicular, or strongly carinate and sub-serially spicular. The anal pleurae are generally very long and stout, but sometimes considerably shorter — the length possibly depending upon sex. The spine armature of the legs is slightly variable but does not depart very much from the following arrangement: 1st pair with an anterior patellar spur, 1st to 5th or 6th with an anterior tibial spur, 1st to 17th with two tarsal spurs, 18th with one or two tarsal spurs, 19th with one tarsal spur, 20th with or without a tarsal spur, 21st always without a spur. Consequently I do not think that Dr. Haase's variety *insulare* is of very great value. The largest specimen obtained measures 65 mm. in total length.

This species ranges from China and Japan to Java and Ceylon.

13. *Otostigma rugulosum*, PORATH.

t. c., p. 21.

Although this species has hitherto not been recorded from the Oriental Region, it having been described from Mauritius, yet it is unquestionably one of the commonest centipedes in Burma.

Specimens were obtained by Fea at Teinzò, Bhamò, Mandalay, Taikkyi (Pegu) and Palon; and by Mr. Oates at Mandalay, Rangoon, Thayetmyo, Pegu Hills, Moulmein, S. Tenasserim, Reef Island (Tavoy) and Table Island (Andamans).

It is exceedingly variable in colour, and presents very many strong points of resemblance with *Ot. carinatum*. Thus in the number of its antennal segments, in the length of these appendages, in the form and armature of its prosternal maxillary plates, in the structure of its tergites and sternites, in the spine armature and length of the anal legs, in the numbers of spurs upon the walking legs and in the spine armature of its pleurae, it is in no way to be recognised from *O. carinatum*; but the anal pleurae appear to be slenderer and not so long, there are usually fewer spines on the anal femora and the tergites although strongly or weakly wrinkled do not appear to be spi-

cular. Again the colour is more olivaceous and none of the specimens obtained approach in size the largest example of *O. carinatum* — 45 mm. being about the maximum length. And finally the head and body are perhaps ordinarily less strongly punctured.

14. *Otostigma spinosum*, PORATH

t. c. p. 22.

Locality: Two specimens obtained by Mr. Oates in S. Tenasserim; and one at Malewoon (S. Tenasserim) by Sig. L. Fea.

This species is much less common than either of the two preceding, three specimens only having been obtained.

It may be recognised from both of them by having the tergites not wrinkled, by the presence of a spine on the femur of the 20th pairs of legs, and of a spur on the tarsus of the anal legs.

Previously known localities for this species were Java, Sumatra and Borneo.

15. *Otostigma geophilinum*, HAASE.

Op. cit. p. 77, pl IV, fig. 81.

Since the specimen described by Dr. Haase was imperfect and no account could be given of the anal legs, I take this opportunity of supplementing this author's description from an examination of undamaged examples.

Body slender.

Colour olivaceous or ochraceous.

Head plate longer than wide.

Antennae long, attenuate, composed of 18 segments, whereof the basal two are naked, the rest pubescent.

Maxillary sternite elongate; prosternal plates long, in contact, each bearing three sharpened teeth, whereof the external is separated; basal tooth well developed and sub-dentate; the claw short curved and powerful.

Tergites finely punctured, laterally slightly wrinkled, from the third bisulcate, from about the seventh or ninth with raised margins.

Sternites strongly bisulcate and with a feebler, abbreviated median sulcus.

Anal somite; tergite not or very slightly impressed behind; *pleurae* with pores less closely set than is usually the case, the process, well developed, smooth and terminated by two or three small spines, without superior or lateral spines; *sternite* narrowed posteriorly, with lightly concave hinder border; *legs* robust or slender, either almost smooth or strongly wrinkled and longitudinally sulcate, normally armed with about 10 spines, 3 on the upper inner edge, 1 on the posterior half of the inner surface, 4 on the inferior inner edge, and 3 on the inferior outer edge, tarsus not spurred, claws spined.

Legs, except those of the 20th somite, with proximal tarsal segment bearing a spur; claws of all the legs spined.

Length up to 35 mm.

Localities. Specimens obtained by Sig. L. Fea at Teinzò, Upper Burma, on Mt. Mooleyit (1800-1900 m.), and at Taikkyi (Pegu); by Mr. Oates in the Pegu Hills and at Rangoon.

This species, remarkable for its slender build, large pleural pores etc., may easily be recognised from all the other Burmese forms. Undoubtedly it is most nearly allied to *Ot. nudum*, Pocock, from Madras; but this last named may be distinguished by the entire absence of tarsal spurs.

16. *Otostigma ceylonicum*, HAASE.

t. c. p. 69, pl. IV, fig. 67.

Specimens taken at Palon (Pegu) by Sig. L. Fea; at Moulmein and on Reef Island (Tavoy) by Mr. Oates.

This species is very distinct and is easily identifiable by its short antennae, impressed sternites, small pleural processes, short anal legs (of which the femur bears only a few spines) and spurred 20th pair of legs.

The wrinkling of the tergites is subject to much variation. In some Ceylonese specimens which the Museum has lately received from Mr. E. E. Green the tergites are very strongly wrinkled; but those from Palon are much less wrinkled and the single example obtained at Moulmein is almost smooth. Very little reliance, indeed, can be placed upon the corrugation of the tergites in this genus, and in this instance it most certainly is not a sign of affinity, as Dr. Haase imagined, between *Ot. ceylonicum* and *Ot. rugulosum*. The latter, as already pointed out, is closely allied to *Ot. carinatum*, and *Ot. ceylonicum* falls into one group with *Ot. splendens* and *Ot. morsitans* — two species from Madras, which I described in the Annals and Mag. of Nat. Hist. (6), V, pp. 245-246, 1890.

The first named, however, has much longer and stronger anal pleurae, and no spur on the tarsi of the 20th pair of legs; while the second has spicular tergites and the sternites laterally and not mesially impressed.

17. *Otostigma feae*, sp. n.

Colour pale olivaceous, smooth and shining with metallic lustre.

Head plate sub-circular, minutely punctured, not sulcate.

Antennae of moderate length, composed of 18 segments of which the basal two are bare and the rest pubescent.

Maxillary sternite and feet scarcely punctured, the prosternal plates, small, not contiguous, each furnished with three blunt teeth, whereof the two internal are fused together; basal tooth conspicuous, with a single small lateral nodular denticle.

Tergites scarcely punctured, in the posterior half of the body lightly wrinkled, from the fourth bisulcate, from the eleventh or twelfth marginate.

Sternites not bisulcate, each marked with a median posterior impression, those in the middle of the body furnished mesially, in addition, with three fainter impressions arranged in a transverse row.

Anal somite; *tergite* faintly impressed behind; *pleurae* normally punctured, the process well developed with bifid extremity and two lateral and one superior spines; *sternite* with lightly concave hinder margin; *legs* long and slender, femur armed with thirteen or fourteen spines, arranged as follows -- 3 (one apical) on the upper-inner edge, 6 set in two sub-parallel series on the inner surface and 5 arranged in a longitudinal series on the under outer surface; *tarsus* not spurred.

Legs with claws spined and *tarsi* (except the anal) spurred, the first pair being furnished in addition with an anterior tibial and tarsal spine.

Length 28 mm.

Habitat. Carin Mts., Cheba district, village of Meteleo 900-1200 m. One specimen collected by Sig. L. Fea.

This species is undoubtedly different from all the others here considered, but it is impossible to point out its affinities. In some respects it resembles *Ot. orientale*, Porath, but may be at once recognised from it by the absence of conspicuous sulci on the sternites.

18. *Rhysida immarginata* (PORATH).

Syn.	<i>Branchiostoma immarginatum</i> ,	Porath, op. cit. p. 24; and authors.
"	"	<i>indicum</i> , Kohl., Arch. f. Nat., 1881, p. 67.
"	"	<i>gymnopus</i> , id. ibid.
"	"	<i>subspinosum</i> , Tömösvary, Term. füzetek, p. 885, p. 65, pl. III, fig. 14-16.
"	"	<i>ceylonicum</i> , (var. of <i>gymnopus</i>), Haase, op. c. p. 86.

For the right of priority of *Rhysida* over *Branchiostoma* see Wood, Journ. Ac. Sci. Philad. (2) V., p. 40 and Pocock, Ann. Mag. Nat. Hist. (6), V, p. 244.

Exceedingly abundant in Burma. Specimens were obtained by Sig. L. Fea at Bhamò, Mandalay, Palon, Rangoon, Kaukareet, and Malewoon, by Sig. Comotto at Minhla and by Mr. Oates at Akyab, Mandalay, Rangoon, Thayetmyo, Moulmein, S. Tennasserim and on Table Island, Double Island and Great Cocos Island (Andamans).

Dr. Haase made out the synonymy of this species so far as *indicum* and *subspinosum* are concerned, but I have no hesitation in adding *gymnopus* and *ceylonicum* to the list. I have examined a very great number of specimens of the species and I find that the characters upon which *gymnopus* was based are very variable. The spine armature of the anal legs is always inconstant in its arrangement, and it is a noticeable thing with regard to *Centipedes* that when, as is the case with *R. immarginata*, the spines become reduced in number their presence or absence is of little use in determining the species. This is well exemplified by *Sc. subspinipes*. The presence or absence, too, of a tarsal claw on the preanal legs cannot be depended upon, nor yet can the number of spines on the anal pleurae.

19. *Rhysida longipes* (NEWPORT).

Syn. *Branchiostoma longipes*, Newport, Tr. Linn. Soc. XIX, p. 411 (no. 2).

" " " Haase, op. cit., p. 83 (where other synonyms will be found).

This is a wide-spread form, examples having been recorded from localities in both the Old and the New World. In Burma it is fairly common, though apparently not so common as *Rh. immarginata*. Specimens were obtained by Sig. L. Fea at Palon (Pegu), and by Mr. E. W. Oates at Pynimana, Akyab, Rangoon, Pegu Hills and Mandalay.

This species may be easily recognised from *Rh. immarginata* by its strongly spined anal femora and by its conspicuously marginate posterior tergites.

20. *Heterostoma parviceps*, n. sp.

Body relatively slender, slightly attenuated anteriorly and posteriorly.

Colour of the body olivaceous with faint metallic lustre, or ochraceous with olivaceous posterior borders to the tergites; legs and antennae ochraceous or ochraceo-olivaceous.

Head plate somewhat ovate, longer than it is wide, sparsely punctured.

Antennae of moderate length, composed of 19-20 segments, whereof the basal four are bare and the rest pubescent.

Prosternal plates of maxillary sternite bearing four, strong, sharp teeth.

Tergites punctured, from the third bisulcate, from the fifth marginate.

Sternites conspicuously bisulcate, the sulci more or less abbreviated posteriorly, with a feebly indicated posterior median impression.

Anal somite; tergite of normal form; *pleurae* thickly punctured, elongate and somewhat slender, armed at the apex with two small nearly contiguous spines, with one small superior spine and two or one small lateral spine; *sternite* much narrowed posteriorly with emarginate hinder border; *legs* moderately robust, femur armed normally with eight or nine spines, that is 4 in an irregular series on the upper inner edge, 2 on the under inner edge and 3 or 2 on the under outer edge; claw either with or without minute basal spurs; tarsus not spurred.

Legs (except those of the 20 somite) with the proximal tarsal segment spurred.

Length up to 76 mm.

Locality. Thagatà on Mt. Mooleyit (one specimen) and village of Meteleo on the Carin Mts. (one specimen 900-1200 m.) obtained by Sig. L. Fea; one specimen from S. Tenasserim taken by Mr. E. W. Oates.

In the spine armature of its anal femora and anal pleurae, as in the absence of tarsal spurs from the legs of the 20th somite, this species comes nearest to *H. bisulcatum* of Tömösvary, a species of which the Museum possesses specimens from Borneo and Corea. But *parviceps* may be at once recognised from this by its conspicuous sternal sulci, its more slender build, its longer antennae and longer pleurae. From *H. rapax* of Gervais, of which the Museum possesses several examples from Silhet, this species may be at once separated by the difference in the termination

of the anal pleurae. Perhaps it comes nearest to the ♀ of the Ceylonese and Indian species *H. spinosum* of Newport, but this last species is much more robust, the sternal sulci are less conspicuous, the tarsi of the 20th pairs of legs are spurred and the anal claws are distinctly spined at the base.

21. **Cryptops feae**, sp. n.

Colour; of a uniform ochraceous tint throughout.

Head plate somewhat pentagonal in shape, overlapping the anterior border of the first tergite, marked in its posterior half by two fine anteriorly converging sulci, sparsely marked with setigerous punctures.

Antennae of normal length, composed of 17 segments and thickly clothed with shorter and longer bristles.

Maxillary sternite with anterior border almost straight, very lightly sinuate, bearing four short bristles on each side; claw of normal length and curvature, somewhat slender.

Tergites with the ordinary complete sulci and the lateral, abbreviated, curved, oblique sulci; the second tergite without the lateral sulci, but with the median sulci complete; the first tergite also conspicuously sulcate, there being a conspicuous anterior, angular, transverse sulcus, to the angle of which the two longitudinal sulci converge, eventually meeting it in a depression; all the tergites, except the last, with unraised lateral margins.

Sternites with the ordinary cross-shaped arrangement of sulci.

Anal somite; tergite with straight, sub-parallel, raised lateral borders and angularly produced posterior border; *pleurae* smooth behind, conspicuously marked with many — 15-20 pores in front; *sternite* wide, nearly parallel sided with rounded angles and straight posterior border; *legs* normal in shape, femur and patella thickly armed beneath with stout spiniform hairs, tibia furnished beneath with a series of five or six short dentiform spines, and the first tarsal segment with a series of three or four similar spines, metatarsus not spined; the femur is furnished

above with a single minute posterior internal spine, the patella and tibia with two such spines, one internal and one external, femur and tibia posteriorly sulcate above.

Legs furnished with stronger and weaker, more or less spini-form hairs.

Length about 14 mm.

Habitat. Palon; three specimens collected by Sig. L. Fea.

This species is very distinct. In the continuation of the dorsal sulci on to the head-plate it seems to approach *Cr. sulcata*, of Haase from Australia; but in this last named form the cephalic sulci are complete, running from the anterior to the posterior border of the head, whereas in *Cr. feae* they are present only in the posterior half of this plate. Moreover *Cr. sulcata* has an entirely different arrangement of the sulci of the first tergite. With respect to these sulci *Cr. feae* is quite peculiar and resembles some species of the genus *Newportia*.

22. *Cryptops doriae*, sp. n.

Colour; wholly ochraceous or testaceous.

Head plate about as wide as it is long, sparsely hairy, covered behind by the first tergite, not sulcate.

Antennae somewhat slender, densely pubescent.

Maxillary sternite punctured and hairy, with anterior border nearly straight and furnished on each side with four symmetrically arranged setae.

First tergite overlapping the head-plate, not sulcate; basal plate invisible; the rest of the tergites, except the last and the second and third, marked with the four normal sulci and with a low median longitudinal ridge; sparsely and shortly hairy; lateral margins unraised.

Sternites marked with the normal cross-shaped sulci.

Anal somite; *tergite* and *sternite* of normal form; *pleurae* smooth behind, furnished in front with about 17 larger and smaller pores; *legs*; femur and patella with a median notch in the middle of the superior posterior margin, tibia and first tarsal

segment with superior posterior angles slightly produced; femur and patella adorned, especially beneath, with very many sub-spiniform hairs; patella furnished beneath at the hinder end with a single spiniform tooth, tibia with a row of seven spiniform teeth and first tarsal segment with a row of five similar teeth.

Legs hirsute but not spined.

Length up to 15 mm.

Habitat. Palon (Pegu), Shwegoo (Upper Irrawaddy) and Carin Mounts, Asciiu Ghecu district, village of Chiala 1200-1600 m. Collected by Sig. L. Fea.

Closely allied to *Cr. hortensis*, Leach, but differing in the armature of the anal legs. These appendages in *hortensis* have their two proximal segments furnished beneath with short, stiff, spiniform setae; in *doriae* the setae are much longer, finer and consequently much less spiniform.

Three specimens only were taken, one at each locality. The example from Shwegoo is imperfect having lost its anal legs, but it appears to be referable to the same species as is the example from Chiala. That from Palon is of smaller size and differs somewhat markedly from the other two in having its tergites conspicuously marbled with black. Since it may prove to be a distinct species or variety from the others, I propose to consider the one from Chiala as the type.

23. *Cryptops inermipes*, Pock.

Proc. Zool. Soc. 1888, p. 556, fig.

Habitat. Mount Mooleyit.

Two specimens were obtained by Sig. L. Fea at the above locality. Unfortunately neither of these is furnished with the anal legs, but they appear to be specifically identical with the individual from Christmas Island that I made the type of *Cr. inermipes*.

The length of the largest specimens is 29 mm.

24. *Cryptops* sp.?

Mr. Oates obtained two specimens of a *Cryptops* from Great Cocos Island (Andamans). Both of them, however, are too damaged to identify. In all probability they are referable to *Cr. doriae*, but in the absence of anal legs, there can be no certainty on this point.

GEOPHILIDAE.

25. *Mecistocephalus punctifrons*, NEWPORT.

- Syn. **M. punctifrons**, Newport, Proc. Zool. Soc. 1842, p. 179; Tr. Linn. Soc. XIX, p. 429, pl. XXXIII, fig. 17 (1845); and all authors.
- » **guildingii**, Newport, Tr. Linn. Soc. XIX, p. 429; Meinert, Nat. Tidsskr. (3), VII, p. 97 (1871).
- » **rubriceps**, Wood, Journ. Ac. Sc. Phil., p. 42 (1863).
- » **pilosus**, id. t. c. p. 43.
- » **heteropus**, Humbert, Mém. Soc. Phys. Genève, XVIII, p. 19 (1865).
- » **cephalotes**, Meinert, Nat. Tidsskr. VII, p. 100 (1871).
- » **gulliveri**, Butler, Phil. Trans. CLXVIII, p. 500 (1879).
- » **sulcicollis**, Tömösvary, Term. füzet. IX, p. 64, pl. III, fig. 3 (1885).
- » **heros**, Meinert, Proc. Am. Phil. Soc. XXIII, p. 214 (1886).

To this list ought perhaps to be added *tenuiculus* of L. Koch from Japan.

As might be inferred from the number of synonyms — the list being, I believe, complete up to date — this species has a very wide range. It is found almost everywhere in the Oriental Region, where it is certainly the dominant species of the genus. So far as extra-oriental localities are concerned the British Museum possesses examples from Socotra, Rodriguez (type of *gulliveri*, Butl.), Madagascar and the Bermudas.

Moreover, Mr. Bollman has lately recorded it from Cuba, and Newport's type of *guildingii* was from St. Vincent (West Indies).

It is very abundant in Burma. Specimens were obtained by Sig. L. Fea at the following localities: Upper Irrawaddy: Teinzò Bhamò, Shwegoo, Thigyan, Mandalay; — Lower Burma: Prome, Palon, Rangoon; — Tenasserim: Mooleyit, Meetan,

Kaukareet, Moulmein, Malewoon; — Carin Mountains: Cheba district (900-1200 m.), Ghecu district (1200-1400 m.), Asciiui-Cheba district (900-1400 m.), Asciiui Ghecu district (1000-1200 m.); by Sig. Comotto at Minhla and by Mr. E. W. Oates at Tharrawaddy, Akyab, Thayetmyo, Rangoon, Moulmein, S. Tenasserim, Table Island (Andamans), Reef Island (Tavoy).

26. **Mecistocephalus castaneiceps**, HAASE.

Op. cit., p. 102, pl. VI, fig. 109.

A single specimen obtained by Mr. E. W. Oates on Table Island (Andamans).

This is only the third record of this species. The specimen described by Dr. Haase was taken on Pulo Edam — an island off the North coast of Java — and subsequently Mr. J. J. Lister obtained many specimens on Christmas Island in the Indian Ocean (1). Thus so far as the evidence at present goes, the species appears to be an insular form.

It may be recognised from the other two Burmese species by possessing 47 pairs of legs as opposed to 49 in *punctifrons* and 45 in *spissus*.

27. **Mecistocephalus spissus**, WOOD.

Journ. Ac. Philad. (2), V, p. 43.

Body stout, posteriorly attenuate.

Colour; head and first few tergites castaneous, rest of the body of a dark greenish hue, legs pale yellow.

Head plate narrowed posteriorly, furnished in its posterior third with two anteriorly diverging sulci, punctured and hairy.

Basal plate also punctured.

Maxillary sternite excised in front and furnished with two small teeth; maxillary feet punctured and furnished internally with four teeth, one for each segment.

(1) Pocock, Proc. Zool. Soc. 1888, p. 558.

Antennae short and pubescent.

Tergites, except a few at the anterior end of the body, bisulcate and rugulose.

Sternites in their posterior half marked with a straight, unbranched, longitudinal sulcus.

Anal pleurae hirsute and furnished with about 40 conspicuous, irregularly arranged, circular pores.

No. of pairs of legs 45.

Length about 40 mm.

Obtained by Sig. Fea at Teinzò (Upper Burma); — Mt. Mooleyit (Tenasserim); — Carin Mountains: Cheba or Biapo (900-1400 m.), Ghecu (1200-1400 m.), Asciiui Cheba (900-1400 m.), Asciiui Ghecu (1200-1600 m.) and by Mr. Oates at Moulmein and on Reef Island (Tavoy).

Judging by the localities this species has a wide range in Burma, but specimens are much less commonly met with than are those of *M. punctifrons*. Thus while several specimens of *M. punctifrons* were in most cases met with at the different localities, examples of *M. spissus* were obtained by ones or at most by twos. Apart from the smaller number of legs this species never appears to attain the dimensions to which *M. punctifrons* may grow, and, moreover, it is usually differently coloured — the contrast between the dark marbled green of the trunk and the clear yellow of the legs being a very marked feature.

Hitherto the only recorded specimen of this species was that described by Dr. Wood from Oahu.

28. *Orphnaeus brevilabiatus* (NEWPORT).

Syn. *Geophilus brevilabiatus*, Newport, Tr. Linn. Soc. XIX, p. 436, no. 9 (1845).

- » » *lineatus*, id. ibid. no. 10.
 » » *bilineatus*, Peters, Reise Mossam., Ins. p. 531, pl. XXIII, fig. 4.
 » *Orphnaeus lividus*, Meinert, Nat. Tidsskr. 3, VII, p. 19.
 » » *brasiliensis*, id. ibid., p. 20.
 » *Orya xanti*, Tömösvary, Term. füzetek, IX, p. 64 (1885).

This species is found in all tropical countries.

I have carefully compared the types of *brevilabiatus* and

lineatus and can find no reasonable grounds for thinking that they belong to different species. Moreover, there is nothing, so far as I can see, in the description of *O. brasiliensis* to justify Dr. Meinert in separating this form from *O. lividus*, which Dr. Haase has shown to be synonymous with *brevilabiatus*.

The species appears to be common in Burma. Specimens were obtained by Sig. L. Fea at Teinzò, Bhamò, Mandalay, Minhla, at Palon (Pegu) and Meetan on the Houngdarau River (Tenasserim); and by Mr. Oates at Rangoon and S. Tenasserim.

Genus **Himantarium**

The two species included here under this genus, do not fall within the limits that Dr. Latzel has defined for it. I think, however, that it is wiser, until more be known about the *Geophilidae*, to employ the term in a wide sense, so that it may embrace such forms as *laevipes* and *subterraneum* (which have been designated *Stigmatogaster*), *gestri*, *gabrielis*, *rugulosum*, etc.

Both the species recorded in this paper differ from *Himantarium*, as typified by *gabrielis*, in that the spiracular sclerites are in contact with the tergites.

29. **Himantarium meinertii**, Pockock.

Journ. Linn. Soc. Zool. XXI, p. 289, pl. XXIV, fig. 1.

Recorded originally from Sullivan Island, in the Mergui Archipelago.

Mr. Oates took several specimens of this fine species on Great Cocos Island (Andamans), Reef Island (Tavoy) and at Moulmein; and Sig. L. Fea obtained a splendid series at Palon.

I am glad to be able to supplement my original description by a few observations from this series obtained at Palon.

The largest specimen measures 130 mm. in length and has 128 pairs of legs.

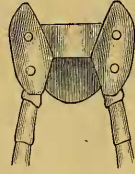
The prebasal plate is not always visible.

The anal legs appear to be long and slender in both sexes; they may be more than twice the length of the legs of the preceding somite.

In young specimens (e. g. one of 33 mm. in length) the anal pleurae are furnished with only three enormous pores, one being above and in front, the others below (fig.).

In the anterior half of the body the claws (fig.) are very curiously constructed, being perforated by a distinct orifice. This is formed by the forward growth of an inferior basal spine, which ultimately meets and apparently unites with the apex of the claw.

The spiracular sclerites are smaller than the prescutellar, and are in contact with the tergites.



Himantarium Meinerti.

30. *Himantarium doriae*, sp. n.

Body long and slender, not markedly attenuate either anteriorly or posteriorly.

Colour ochraceous above, testaceous beneath.

Head plate (fig.) wider behind than in front, covering the maxillary feet.

Antennae very thick at the base and in contact, attenuate, the apical segment ovate and as long as the two that precede it.

Prebasal plate not visible; basal plate short, as wide as the head, with parallel sides.

Maxillary sternite (fig.) with chitinous lines, a little wider than long, the jaws weak, falling far short of the anterior margin of the head plate; the claw, slender and curved.

Tergites not bisulcate.

Sternites not sulcate, but marked in the hinder half by a conspicuous, small, sub-crescentic, porous area.

Anal somite (fig.); *tergite* wide, narrowed behind, almost covering the pleurae; *pleurae* not inflated and wholly smooth; *sternite*

wider than long, with converging sides and straight or lightly convex posterior margin; *legs* (fig.) composed of six segments, without claws, thick in the male, thin in the female, about as long as the legs of the preceding somite.

No. of pairs of legs in the ♂ 95, in ♀ 99.

Legs slenderer than in the preceding species and with simple claws.

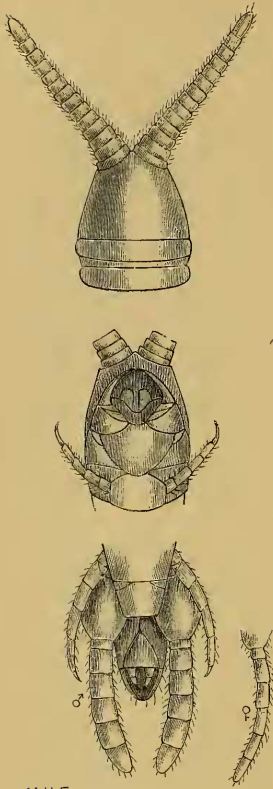
Length 56 mm.

Habitat. Moulmein. Two specimens collected by Mr. E. W. Oates.

This species may be at once distinguished from the preceding by the absence of pleural pores, the shortness of the anal legs, the conspicuous ventral porous area etc.

In these particulars it evidently comes close to *Himantarium insigne*, Meinert from Kooloo. But the length of the body as compared with the number of somites is very different. Thus the female of *insigne* is 105 mm. long and has 77

pairs of legs, while the female of *doriae* is 56 mm. long and has 99 pairs of legs.



M.H.F.

Himantarium Doriae.

Himantosoma, gen. nov.

Cephalic lamina covering entirely, or almost entirely, the maxillary feet.

Antennae parallel sided or incrassate; not attenuate.

Prebasal lamina concealed.

Basal lamina as wide as the head, but exceedingly short, five or six times as wide as it is long.

Maxillary sternite very short, mesially depressed, without chitinous lines; unarmed; claw long, lightly curved or blade-like.

Anal legs short, terminated by a claw.

Pleurae porous.

Sternites with porous areas.

Spiracula sclerites in contact with the tergites and much smaller than the large prescutellar sclerites.

This genus, which is established for the reception of the following two species and for *H. striatum* (1) from Madras — a species which I provisionally referred to *Himantarium* — may be recognised from *Himantarium* by its very short basal plate, short and mesially depressed maxillary sternite, powerful maxillary claw, incrassate and not attenuate antennae, clawed anal legs etc.

H. typicum may be taken as the type of the genus.

31. *Himantosoma typicum*, sp. n.

Syn. *Himantarium indicum*, Pocock, Journ. Linn. Soc. Zool. XXI, p. 289 pl. XXIV, fig. 3.

Not *H. indicum*, Meinert, Proc. Amer. Phil. Soc. XXIII, p. 228.

Body robust, attenuate toward its anterior and posterior end.

Colour ochraceous above, testaceous beneath, the anterior tergites slightly infuscate.

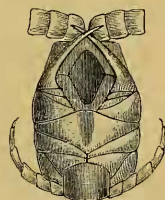
Head plate sub-quadrangle, punctured and hairy.

Antennae thick and hairy, incrassate towards the middle of their length, the apical segment ovate and longer than the segment that precedes it.

Claws (fig.) of the maxillary feet projecting in front beyond the margin of the head-plate, lightly curved and blade like; the depression on the sternite wide in front and narrowed behind.

Tergites smooth and shining, those in the middle of the body lightly bisulcate and obsoletely wrinkled between the sulci.

Sternites not sulcate, mesially depressed and furnished in the



Himantosoma typicum.

(1) Ann. Mag. Nat. Hist. (6) V, p. 248, pl. XII, fig. 4.

depression with a single, anterior, circular, porous tract and a transversely elongate, double or single posterior tract.

Anal somite; *tergite* narrowed posteriorly and not covering the pleurae; *pleurae* moderately inflated, hairy, distinctly and closely porous above and beneath in front, the lower surface posteriorly and externally without pores; *sternite* longitudinally oblong, with median depression, prosternal plates distinct; *legs* (in ♂) very thick and shorter than those of the preceding somite, composed of six segments, the apical segment very small and conical, sometimes furnished with an exceedingly minute claw; generative legs composed of two segments.

Legs long and terminated by a strong claw.

No. of pairs of legs 81. Total length up to 69 mm.

Two male specimens from Moulmein. Collected by Mr. E. W. Oates.

When writing a report upon the *Myriopoda* of the Mergui Archipelago, I sent some of the *Chilopoda* to Dr. Meinert of Copenhagen, who very kindly examined and named them for me.

One specimen was identified by this author as *Himantarium indicum*, a species which he himself had characterised upon an example from Kooloo, belonging to the Museum at Cambridge, Massachusetts.

At that time I had not long begun the study of *Myriopoda* and consequently could not take upon myself to call in question the correctness of Dr. Meinert's opinion. But since then, having more material to work upon and having carefully compared specimens specifically identical with the individual from Mergui with the description of *H. indicum*, I have convinced myself that Dr. Meinert fell into error in identifying my specimen as that species. I have consequently taken this opportunity of correcting the mistake, and have described Mr. Oates' specimens as the types of a new species.

It differs from *H. indicum* in that the anal pleurae are porous and the anal legs not longer than those of the preceding somite. Moreover, I can not be sure that *H. indicum* belongs to this genus or to *Himantarium*. This species may be separated from

H. striatum by possessing six segments to its anal legs; its anal pleurae are less inflated and its tergites are comparatively smooth.

The figure of this species on Plate XXIV of vol. XXI of the Journal of the Linnean Society, is erroneous in some particulars. Thus the antennae are too slender in their distal half, the head is too rounded anteriorly, the claws of the maxillary feet are too short and too curved and the anal pleurae should have been porous.

32. ***Himantosoma porosum***, sp. n.

Body anteriorly and posteriorly attenuate; body and limbs hairy.

Colour pale ochraceous above, testaceous beneath.

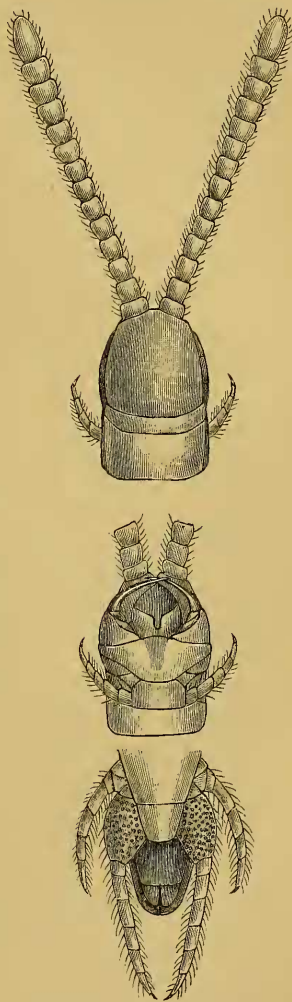
Head-plate (fig.) convex, sub-quadrate, almost covering the maxillary feet.

Maxillary sternite (fig.) less depressed in the middle than in the preceding species and slightly longer from before backwards; the claw more slender and less blade-like, scarcely overlapping the head-plate in front.

Antennae (fig.) long, incrassate, apical segment ovate and twice the length of the preceding segment.

Tergites smooth, but hairy, not bisulcate, very obsoletely wrinkled in the middle of the body.

Sternites thickly and coarsely punctured and hairy, not bisulcate, with an anterior circular porous area and a posterior transverse porous area, the two separated by a feebly indicated median transverse line.



Himantosoma porosum.

Anal somite (fig.); *tergite* smooth, quadrate, not narrowed behind and not covering the pleurae; *pleurae* moderately inflated, more so than in the preceding species, and closely porous throughout, the pores especially numerous close to the sternite; *sternite* not mesially depressed, with straight posterior margin and converging, lightly convex, lateral margins; *legs* shorter than the preceding pair, slender, composed of six segments and terminated by a strong claw.

With 59 pair of legs. Length 26 mm.

A single ♀ specimen from Moulmein collected by Mr. E. W. Oates.

This species differs from *H. striatum* in having the anal legs composed of six segments and the tergites smooth and not striate. From *H. typicum* it may be recognised by its more inflated pleurae, weaker and more curved maxillary claw, porous and hairy sternites etc.
